LA-UR-20-20386
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Title: LANL ISR Summer 2020 Intern Recruiting Flyer

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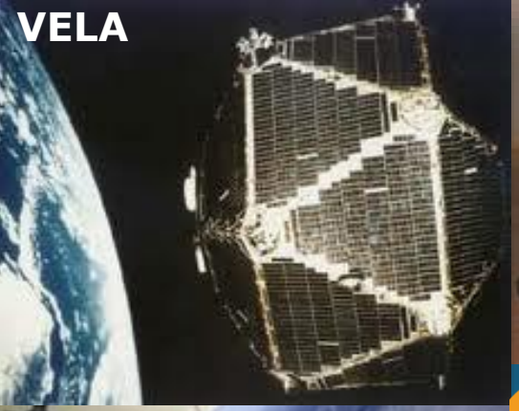
Intended for: Flyer to be used to recruit students at US based universities.

Issued: 2020-01-14



Intelligence & Space Research Division

Who We Are Looking For

Positions Available

- Internships for students currently pursuing BS, MS & PhD degrees
- Post-baccalaureate 2 year position for students who finished a BS degree and want research experience before pursuing a graduate degree

Educational Disciplines

- Space and Atmospheric Science
- Nuclear and Particle Physics
- Plasma Physics
- Computer Science
- Software Engineering
- Electrical Engineering
- Mechanical Engineering
- Systems Engineering

Key Projects

- Concept of Operations development for CubeSat Hyperspectral Imager
- Hardware & software development for neuromorphic computing project
- Bench and system level sensor electronics testing and calibration

About the Area

- Los Alamos , located in the southern Rocky Mountains at 7,500 ft
- Over 80 miles of trails within town for hiking and biking, world class climbing, and 2 national preserves within 20 minutes of town
- Santa Fe is 45min away with a vibrant arts scene, excellent restaurants, and outdoor recreation opportunities

Our Mission

To create, deliver, support, and exploit innovative sensing systems for space-based, airborne, and ground-based applications to address critical national security issues and scientific challenges.

Organization Highlights

LANL's Intelligence and Space Research (ISR) Division has flown over 400 space instruments compromising more than 1400 sensors on more than 200 launches. Today, ISR continues the Laboratory's legacy of helping ensure the nation's security, discovering the processes that govern the space environment, and studying the composition of planetary bodies.

Contact Us

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Job IRC listings

- IRC75715: Engineering Undergraduate Internship Program
- IRC75716: Engineering Graduate Internship Program

LA-UR-XX-XXXXX

Apply: jobs.lanl.gov

Los Alamos NATIONAL LABORATORY EST.1943

VISIT: JOBS.LANL.GOV

Our Work Culture

We believe in open, collaborative, innovative research environments. The urgency and impact of some of the problems that we address requires us to be dynamic, take risks, and push the boundaries of conventional solutions. Our projects are tightly integrated across a range of fields of science and engineering.

Join our team and learn how we:

- Enhance humankind's understanding of the universe, our planetary system, and some of the most complex natural phenomena on our planet.
- Solve the world's most challenging problems through cutting-edge multi-disciplinary research.
- Serve as a trusted advisor to the US government.

Capabilities & Disciplines

Science

- Lightning, ionospheric, and magnetospheric science
- Planetary science and astrophysics
- Science of threat signatures, their impacts, and remediation
- Complex engineered systems spanning broad energy and density domains
- Advanced modeling and simulation, data science, and machine learning

Engineering

- Advanced computer and software architectures and their realization
- Tailored expert-in-the-loop system engineering to satisfy diverse US government stakeholders
- Low-noise analog design and high-speed digital design
- Real-time digital signal processing
- Custom high-reliability solutions, informed by advanced modeling of structural and thermal properties

Fabrication and Test

- In-house high-reliability, certified assembly State-of-the-art test facilities

Key Projects

ISR Division scientists and engineers develop new methods and techniques for national security applications and basic science missions. Some of the major research programs within the Division include:

- Optical, RF, neutron, X-ray, and gamma-ray sensors for ground-based and space applications
- SuperCam instrument for the Mars 2020 Rover mission
- Cognitive sensing and distributed sensor networks
- Space environment sensors on every GPS and many GEO spacecraft
- Thinking telescopes
- Advances analysis and data delivery systems
- Lightning data and science
- Van Allen Probes and MMS
- Theory, modeling, and simulation of complex natural system: ionosphere, magnetosphere and their coupling
- Ultra-low-light imaging

Organization Highlights

Los Alamos National Laboratory has designed, built, and analyzed data from instrumentation for space missions both near and far for more than 50 years. Since the launch of the first *Vela* satellites in 1963, we have provided instruments to monitor international compliance with the Limited Test Ban Treaty. Los Alamos has flown more than 400 space instrument comprising more than 1400 sensors on more than 200 total launches.

Today, the Intelligence and Space Research (ISR) Division continues the Laboratory's legacy of helping ensure our nation's security; discovering the processes that govern space environments; studying the composition of planetary bodies; and capturing data from the most distant, most powerful cosmic explosions.